DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017219 Address: 333 Burma Road **Date Inspected:** 30-Sep-2010

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 Prime Contractor: American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS OBG**

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Splice 6E/7E weld ID: A1, Face A (SMAW R-2 Repairs)
- 2). East Line Lifting Rod Penetration Insert Welds (QC UT of R-1 Repairs)
- 3). West Line OBG Field Welding of Drip Edge (SMAW)
- 4). OBG Field Splice 6W/7W weld ID: B1, Face B (SMAW)
- 5). OBG Field Splice 6W/7W weld ID: C1 & C2, Face B (SMAW Fit-up gear)

1). OBG Field Splice 6E/7E weld ID: A1, Face A (QC UT of R-2 Repairs)

The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing R-2 repair welding of excavated areas per the SMAW process in the 1G (flat) position. The QAI periodically observed QC Inspector Tom Pasqualone was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000-Repair. See photo below. The QAI observed that (4) four indications were laid out for repair and only (3) three were excavated. Repair welding was in process at (2) two locations: Y = 540mm and Y = 670mm. The work at this location appeared to be in general compliance with contract documents.

2). QC UT of East Line Lifting Rod Penetration Insert Welds (QC UT of R-1 Repairs)

The QAI periodically observed QC Inspector Steve McConnel performing UT of R-1 repairs from the A Face of East Line Lifting Lug Rod Penetration Insert Welds. The QAI periodically observed that the QC Inspector utilized

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the insert weld. The QC technicians performed the required shear wave testing during the testing for weld soundness utilizing a .63 x .75 rectangular transducer. The UT examination was completed from face A during the QA Inspectors shift at the following locations: PP9.5 E4 weld 3. The QAI noted that the QC UT results at this location were acceptable. The work at this location appeared to be in general compliance with contract documents.

3). West Line OBG Field Welding of Drip Edge (SMAW)

The QAI periodically observed AB/F approved welder Eric Sparks (ID 3040) performing fit-up, fillet welding and partial penetration welding per the Shielded Metal Arc Welding (SMAW) process in the 4F (overhead) and 3G (vertical) positions to install drip edge pieces on the counterweight side of the West OBG line on both sides of the Suspender Cable bracket at PP12. QC Inspector Jim Cunningham was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-F1202 & ABF-WPS-D1.5-1030. Work was completed at this location and fit-up at PP10 was in process. The QAI observed that the work appeared to be in general compliance with contract documents.

4). OBG Field Splice 6W/7W weld ID: B1, Face B (SMAW)

The QAI periodically observed the in process welding of the OBG Field Splice 6W/7W weld ID: B1 on the B face (interior) per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position by approved AB/F welder Yao Xin Liang (ID 7238). QC Inspector Jim Cunningham was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1040B. Welding of the fill and cover passes was in process during the QA Inspectors shift and work at this location appeared to be in general compliance with contract documents.

5). OBG Field Splice 6W/7W weld ID: C1 & C2, Face B (SMAW Fit-up gear)

The QAI periodically observed AB/F approved welder Rick Clayborn (2773) welding fit-up gear (blank nuts) on the OBG Field Splice 6W/7W, Weld ID: C1 & C2, Face B per the SMAW process in the 4F position. See photo below. QC Inspector Tony Sherwood was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-F1200-A. Fit-up gear and the installation of the backing bar was completed during the QA Inspector's shift. The work at this location appeared to be in general compliance with contract documents.





WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

Conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By:	Madison,Bert	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer